Fig. 13

S21 convert input two text sentences S1 and S2 into R trees Ta and Tb, respectively

S22 numbers from 1 to positive integer n to roots of all subtrees of the R trees Ta and Tb in depth first order from a root of the R tree

S23 x = n1 where n1 denotes number of vertexes of the tree Ta

S24 y = n2 where n2 denotes number of vertexes of the tree Tb

S25 calculate a distance D(Fa(x), Fb(y)) between a forest Fa(x) and a forest Fb(y), using formula 6

S26 calculate a distance D(Ta(x), Tb(y)) between the subtree Ta(x) and the subtree Tb(y), using formula 5

S27 Is y a root of Tb?

S29 Is x a root of Ta?

S31 calculate a distance between the text sentences S1 and S2, using formulae 7 or 8